



Learning that works for Arkansas

**CTE**<sup>™</sup>

**CTE UPDATE  
ACTE SUMMER CONFERENCE**  
JULY 24-29, 2014

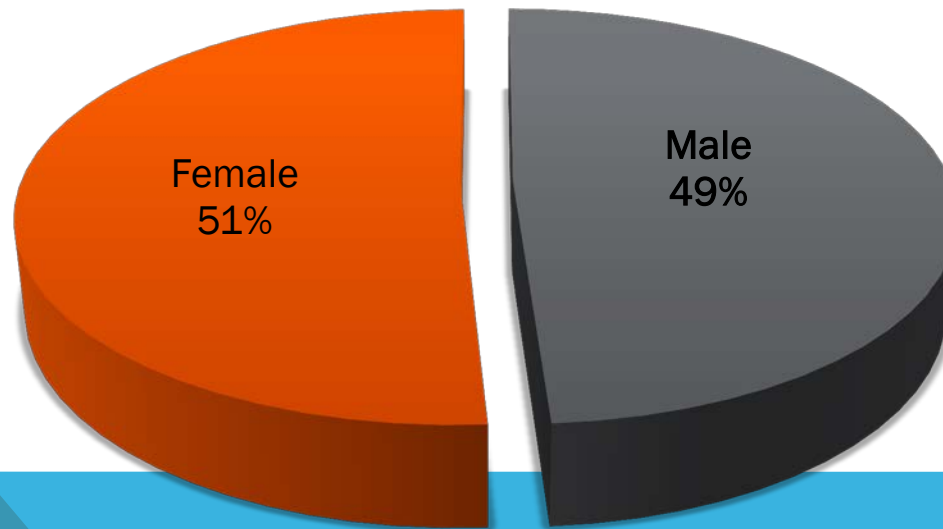


# TOTAL STUDENTS IN 9-12 CTE COURSES IN 2012-2013

All Students in 9-12

**101,950**

**74%** in CTE Courses



# CTE ENROLLMENT IN GRADES 7-12

## (77% OF ALL STUDENTS)

AGRICULTURE	24,294
ARTS & COMMUNICATION	8,436
BUSINESS AND MARKETING	93,051
FAMILY AND CONSUMER SCIENCES	49,627
SKILLED AND TECHNICAL SCIENCES	21,176
STEM	8,383
SUPPORT PROGRAMS	49,304

# TOP THREE CAREER CLUSTERS BY CTE CONCENTRATORS

(Seniors with at least 3 units of  
credit in Program of Study)

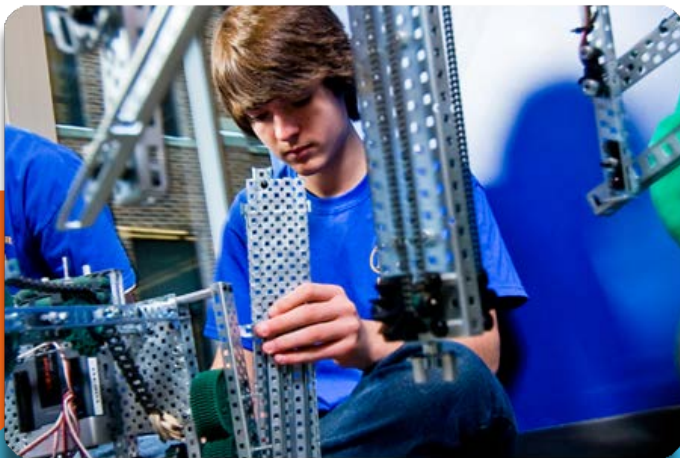
INFORMATION TECHNOLOGY	8,535	54%
HEALTH SCIENCE	1,099	7%
STEM	1,063	7%

# CTE STUDENTS ARE IMPROVING LITERACY SKILLS

- Percent of CTE Completers proficient or above in Literacy has grown by **17.54%** since 2008-09
- The gap between CTE completers and all Arkansas students proficient in literacy has decreased from **5.4%** in 2008-09 to **3.96%** in 2012-13

# CTE STUDENTS ARE IMPROVING MATH SKILLS

- The percent of CTE completers proficient or above in geometry has grown by **13.94%**
- The gap between CTE completers and all Arkansas students proficient in geometry has decreased **from .49% in 2008-09 to "no" gap in 2012-13!!!!**



# COMPLETERS

Completers are students who complete a minimum of 3 units of credit, including the core-required courses, in a CTE program of study and graduate from high school.

Summary of Number of Completers	2008-09	2012-13	Increase
Agriculture Science and Technology	3,130	4,151	<b>32.62%</b>
Arts, A/V Technology and Communications	279	391	<b>40.14%</b>
Business and Marketing Technology	4,468	3,966	<b>-11.24%</b>
Family and Consumer Sciences	2,508	3,712	<b>48.01%</b>
Skilled and Technical Sciences	522	541	<b>3.64%</b>
STEM (Science, Technology, Engineering, Mathematics)	12,945	15,909	<b>22.90%</b>

Why is it important to report completers???

# CTE COMPLETERS/CONCENTRATORS EARNING INDUSTRY CERTIFICATIONS

Occupational Area	2011-12 Count	2012-13 Count	% Increase
Agriculture Science and Technology	119	214	79.83%
Business and Marketing Technology	193	506	162.18%
Family and Consumer Sciences	180	523	190.56%
Skilled and Technical Sciences	223	474	112.56%
STEM (Science, Technology, Engineering, Mathematics)	23	24	4.35%
Career Readiness Certificates	105	352	235%



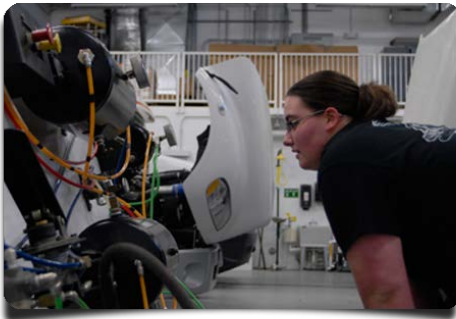
# GRADUATION RATE FOR CTE CONCENTRATORS

STUDENTS WHO HAVE TAKEN AT  
LEAST 2 UNITS OF CREDIT AND WHO  
ARE ENROLLED IN THE 3<sup>RD</sup> AND AR  
IN THE 12<sup>TH</sup> GRADE (LEAVING THE  
SCHOOL SYSTEM THAT YEAR)

90.24%

# CTE COMPLETERS GOING TO COLLEGE

- The number of CTE completers going to college has increased by **5.72%** over the past 5 years.
- The number of CTE students going to college has increased by **24.56%** over the last 5 years.



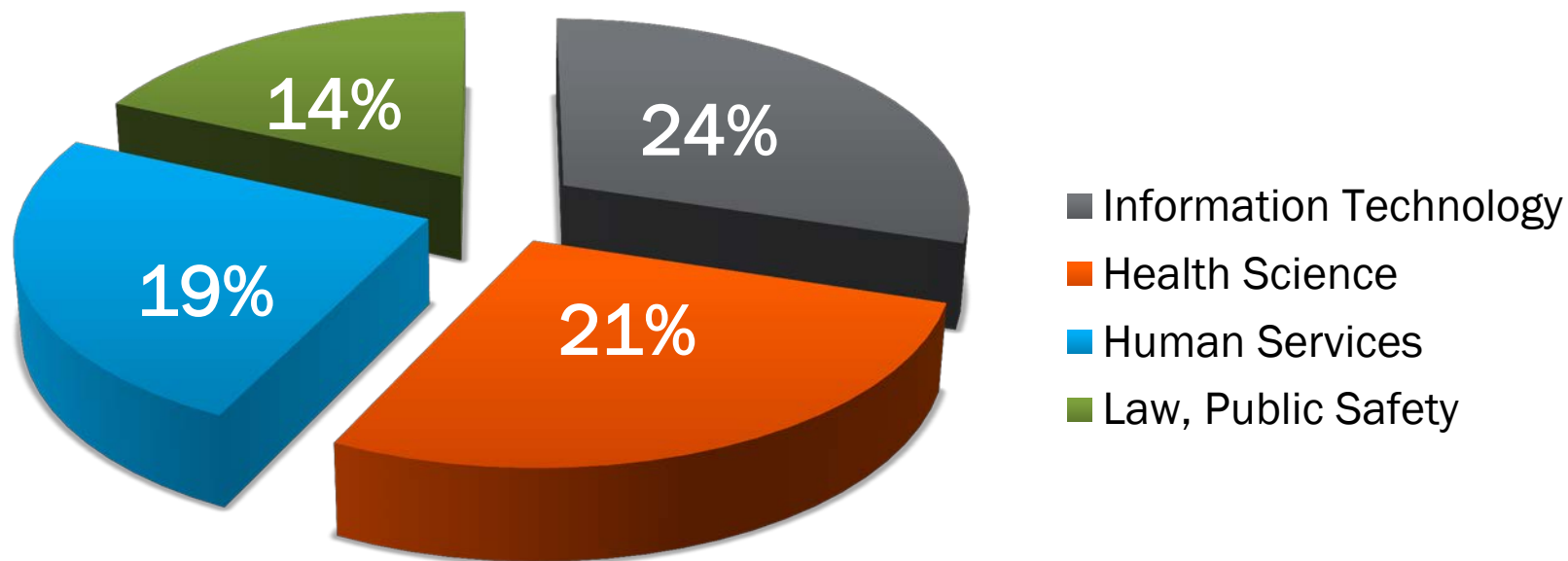
# COLLEGE RETENTION – ARKANSAS PUBLIC SCHOOLS ONLY – CTE COMPLETERS OF 2010-11

ENROLLED IN COLLEGE IN FALL OF 2011-12 FALL TERM	5,540
RETAINED INTO SOPHOMORE YEAR IN 2012-13	3,854
PERCENT RETAINED	70%

# PLACEMENT OF CTE COMPLETERS

Further Education and Training	71%
Employment	20%
Military	4%
Unemployed	5%

## TOP 4 CAREER CLUSTERS WITH FASTEST GROWTH (BY % CHANGE IN EMPLOYMENT BY 2018)



# ARKANSAS KUDER CAREER INTERESTS - 2012

1. Human Services – 16%
2. Arts AV – 13%
3. Health Science – 12%
4. Education and Training – 11%
5. Law Security – 8%
6. Agriculture – 7%

Disconnect for Arkansas – most Kuder data is from 7<sup>th</sup> or 8<sup>th</sup> graders during their Career Orientation Class



# CTE VISION

TO MODERNIZE COLLEGE- AND CAREER-READINESS PROGRAMS  
THROUGH INNOVATION, COLLABORATION,  
ALIGNMENT, AND ACCOUNTABILITY TO PROVIDE STUDENTS  
TECHNICAL SKILLS DEVELOPMENT AND  
GUIDANCE TOWARD CAREER OPPORTUNITIES.

- Improve the Image of CTE
- Improve and Support Program Development
- Improve College and Career Readiness
- Improve CTE Instruction

# GOAL 1: REVIEW CURRENT CTE FRAMEWORK MODEL

- ACE Department of Curriculum and Career Development is working with each CTE department to identify high priority programs of study for review and revision to include College and Career Readiness standards.
- Career Ready 101 has been developed and piloted for use by schools in the 2014-2015 school year as a digital online learning course to meet the requirements of ACT 1280.
- Collaboration with Department of Higher Education to develop a career pathway/program of study model that will align secondary and post-secondary programs of study.
- Reorganize CTE into career pathways through the development of Regional Advisory Councils to identify regional career pathways by high demand, high priority and industry sectors, and to target high priority pathways programs of study for redesign to meet regional demand.
- Regional Advisory Council has been established in Northwest Arkansas and other regions of the state are in the process of establishing regional advisory councils.



# **GOAL 2: ALIGN CTE FRAMEWORKS TO THE *COMMON CORE STATE STANDARDS* AND *INDUSTRY STANDARDS***

- Review Common Core State Standards and determine areas for academic integration and alignment
- Review CTE courses and determine which courses would allow for Core Academic credit
- Review framework process to allow for industry alignment of standards
- Apply the SREB Advanced Career Program of Study Model

# GOAL 3: IDENTIFY THOSE CTE COURSES THAT CAN BE USED ACROSS PROGRAM AREAS FOR COMPLETION OF A PROGRAM OF STUDY

- Review all program areas and determine which courses will fit into other program areas for completion of a POS. [Example: The use of an Accounting class as part of the Agriculture Business POS](#)
- Review all CTE courses to determine which CTE courses could possibly move to other CTE program areas for proper career cluster alignment

# **CTE INITIATIVES**

**THE CAREER AND TECHNICAL EDUCATION  
DIVISION PARTICIPATES IN SEVERAL STATE AND  
NATIONAL HIGH SCHOOL REFORM MODELS  
THAT INTEGRATE ACADEMICS, TECHNICAL  
SKILLS, AND CAREER PREPARATION**

# CTE INITIATIVES

- **STEM Initiative**

- New Tech High School Model, EASTCore, Uteach, and Project Lead The Way (PLTW).
  - PLTW is in over 100 schools in Arkansas – increase of 16 schools in 2013-14
  - \$1.5 million has been given to schools through New Program Start-Up Grants by ACE and members of the Governor's Workforce Cabinet

- **Arkansas Works Initiative**

- Three components – Arkansas College and Career Planning System; the College and Career Coaches program; and the ACT Academy
- Initiative has expanded and now includes 28 counties, 52 school districts and 17 two-year colleges

# SREB – ADVANCED CAREER

- Through a partnership with SREB Arkansas ACE is part of an 11-state consortium to develop curricula, assessments, instructional materials and teacher/counselor training that provide students with relevant and challenging career and technical courses.
- Arkansas developed the Innovations in Science and Technology program of study scheduled for adoption in fall of 2014. Schools may apply for start-up grants by October 1, 2014, for implementation in fall of 2015.
- Curriculum is now in field-testing at three pilot schools: Pocahontas, Hope, Little Rock JA Fair
- Arkansas is hosting training for 5 schools from other states for adoption of Innovations in Science and Technology.

# CAREER ACADEMIES

- Career Academy Model promotes high school reform centered in the community and responsive to its needs and the needs of its students.
  - 14 schools have received funding grants for investigating, planning, and implementation since this initiative was begun in 2012

# MICROSOFT IT ACADEMY

- Microsoft IT Academy provides web-based instruction and opportunities to earn industry-recognized certifications, including Microsoft Office Specialist, Microsoft Technology Associate, or Microsoft Certified Professional.
  - Public high schools, adult education centers and Arkansas Workforce Centers are eligible to access Microsoft IT Academy
  - High school students in the 2013-2014 school year earned 2,588 certifications, which surpasses the goal of 2,500
  - Partnership continues through 2014-2015 for both Microsoft IT Academy and Certiport to deliver curriculum to all school districts and give 79 districts access to unlimited testing

# CERTIFICATIONS/LICENSURES GROWING DEMAND


**42%** of the workforce, need some form of occupational certification or licensure to perform their jobs

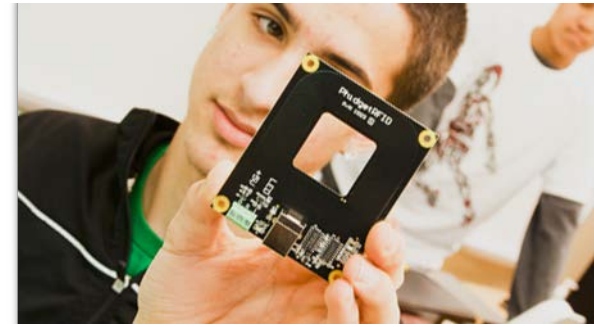
**75%** are test-based

Carnevale et al. Help Wanted: Projections of Education and Jobs Through 2018. (2010)

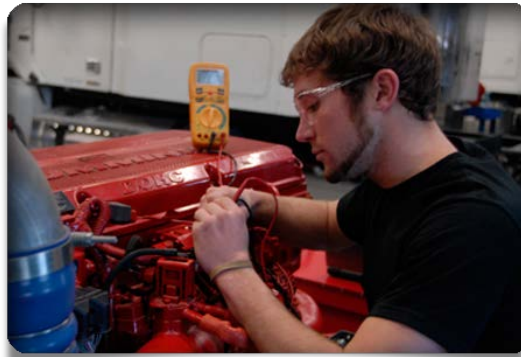


# **ACT 743 – ESTABLISH COLLEGE AND CAREER READINESS STANDARDS**

- Committee has been formed from members of Department of Career Education, Department of Education, Department of Higher Education, AAEA, and secondary career center directors to develop rules and regulations.
  - Revision of legislation to be presented at 2015 legislative session to include funding for the Arkansas College and Career Planning System, to increase funding for the Secondary Career Centers, and to increase funding for New Program Start-Up Program equipment grants.
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# WHY CTE? WHY NOW?



# OVERRIDING ISSUE - DISCONNECTS

About **half of all senior male students** and **2/3 of all senior female students** say they are going to work in professional occupations

Only **8.4% of males** and **3.7% of females** indicate aspirations in technical occupations

**THE DISCONNECT: ONLY 21% OF ALL JOBS IN THE U.S. REQUIRE A 4-YEAR DEGREE OR HIGHER**



# MIDDLE SKILL JOBS

The **29 million “middle” jobs represent one out of every five jobs** in the American economy and nearly half of all American jobs that pay middle-class wages.

Anthony Carnevale et al (2012). Career Technical Education: Five Ways that Pay

# MIDDLE-SKILL JOBS

Middle-skill jobs – (require more than high school but less than a four-year degree) make up nearly **half of all jobs today.**

For every job in the U.S. requiring a 4-year degree, **significantly more require some training past high school, but not necessarily a bachelors or graduate degree.**

Skill demands for middle-skill jobs **will grow.**

Labor supply in that category **is dwindling.**



# SOME FINAL THOUGHTS...

**CTE MUST SEIZE THIS MOMENT IN  
TIME TO CONNECT WITH THE  
*COMMON CORE STATE STANDARDS*  
AND RE-CONNECT WITH *PROJECT  
BASED LEARNING***

**...TO ENSURE THAT OUR STUDENTS  
ARE SUCCESSFUL NOW**

**...BECAUSE OUR STUDENTS  
*SHOULD SIMPLY NOT HAVE TO  
WAIT.***